

CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A recliner mechanism for a seat, the seat having a seat back and a seat pan, the
5 recliner mechanism having a recliner mechanism top, a recliner mechanism back, a recliner mechanism front and a recliner mechanism back, comprising:

a recliner mechanism side having a recliner mechanism side arcuate slot;

the recliner mechanism side arcuate slot disposed to receive a seat holder;

10 the recliner mechanism side arcuate slot having a recliner mechanism side arcuate slot curve;

the recliner mechanism side arcuate slot curve having a recliner mechanism side arcuate slot curve center; and

where the recliner mechanism side arcuate slot curve center is disposed above the recliner mechanism top and between the recliner mechanism front and the recliner mechanism
15 back.

2. The recliner mechanism of claim 1 where the seat has a seat H-Point, and the recliner mechanism side arcuate slot curve center is coincident with the seat H-Point.

3. The recliner mechanism of claim 1 where the seat has a seat H-Point, and the recliner mechanism side arcuate slot curve center is near the seat H-Point.

20 4. The recliner mechanism of claim 1 where the seat has a seat H-Point, and the recliner mechanism side arcuate slot curve center is within about three inches of the seat H-Point.

5. The recliner mechanism of claim 1 where the seat has an H-Point, and the arcuate slot curve has a first arcuate slot curve portion and a second arcuate slot curve portion, where the

first arcuate slot curve portion has a first arcuate slot curve portion center and the second slot curve portion has a second arcuate slot curve portion center, and the first arcuate slot curve portion center is not coincident with the second slot curve portion center.

6. The recliner mechanism of claim 5 where the first slot curve portion center is near
5 the seat H-Point.

7. The recliner mechanism of claim 5 where the first slot curve portion center is coincident with the seat H-Point.

8. A recliner mechanism for a seat, the seat having a seat back and a seat pan, the recliner mechanism having a recliner mechanism top, a recliner mechanism back, a recliner
10 mechanism front and a recliner mechanism back, comprising:

a first recliner mechanism side having a first recliner mechanism side arcuate slot, the first recliner mechanism disposed to receive a first seat holder;

a second recliner mechanism side having a second recliner mechanism side arcuate slot disposed to receive a second seat holder;

15 the first recliner mechanism side arcuate slot having a first arcuate slot curve, the first arcuate slot curve having a first arcuate slot curve center, the first arcuate slot curve center being disposed above the recliner mechanism top and between the recliner mechanism back and the recliner mechanism front;

20 the second recliner mechanism side arcuate slot having a second arcuate slot curve, the second arcuate slot curve having a second arcuate slot curve center, the second arcuate slot curve center being disposed above the recliner mechanism top and between the recliner mechanism back and the recliner mechanism front;

the first arcuate slot curve center and the second arcuate slot curve center forming a line segment; and

the line segment being parallel to the recliner mechanism top.

9. The recliner mechanism of claim 8 where the seat has an H-Point, and the line
5 segment includes the seat H-Point.

10. The recliner mechanism of claim 9 where the line segment is within 3 inches of the seat H-Point.

11. The recliner mechanism of claim 9 where the first seat holder and the second seat holder are attached to the seat back.

10 12. The recliner mechanism of claim 9 where the first seat holder is attached to the seat back, and the second seat holder is attached to the seat back, and the first seat holder is moveable within the first recliner mechanism side arcuate slot and the second seat holder is moveable within the second recliner mechanism side arcuate slot, such that the seat back moves in a seat back curve, where the seat back curve has a seat back curve center, and the seat back
15 curve center is located above the seat pan.

13. The recliner mechanism of claim 12 where the seat back curve center is coincident with the seat H-Point.

14. The recliner mechanism of claim 13 where the seat back curve center is near the seat H-Point.

20 15. The recliner mechanism of claim 14 where the seat back curve center is within 3 inches of the seat H-Point.

16. A seat, the seat having a seat H-Point, comprising:
a seat pan; and

a seat back, the seat back moveable relative to the seat pan along a seat back curve, the seat back curve having a seat back curve center, where the seat back curve center is near the seat H-Point.

17. The automobile seat of claim 16 where the seat back curve center is coincident
5 with the seat H-Point.

18. The automobile seat of claim 17 where the seat back curve center is within about three inches of the seat H-Point.

19. The automobile seat of claim 18 where the seat back has a seat back frame, the seat back frame moveably attached to a first recliner mechanism.

10 20. The automobile seat of claim 19 where the seat back frame is moveably attached to a first recliner mechanism by a seat holder.

21. The automobile seat of claim 16 where the seat back frame has a first leg and a second leg; the first leg moveably attached to a first recliner mechanism and the second leg moveably attached to a second recliner mechanism.

15 22. The automobile seat of claim 21 where the first leg is moveably attached to the first recliner mechanism by a first seat holder and the second leg is moveably attached to the second recliner mechanism by a second seat holder.

23. The automobile seat of claim 22 where the first seat holder is comprised of a first plurality of wheels and the second seat holder is comprised of a second plurality of wheels.

20 24. The automobile seat of claim 22 where the first leg has a first curved rack proximal to the first seat holder and arranged to receive a first pinion.

25. The automobile seat of claim 24 where the first recliner mechanism has a first linear rack located below and spaced from the first curved rack and arranged to receive the first pinion.

26. The automobile seat of claim 25 where the second leg has a second curved rack
5 proximal to the second seat holder and arranged to receive a second pinion.

27. The automobile seat of claim 25 where the second recliner mechanism has a second linear rack located below and spaced from the second curved rack and arrange to receive the second pinion.

28. The automobile seat of claim 21 where the recliner mechanism comprises:
10 a first arcuate member having a first arcuate member slot moveably holding a portion of the first leg;

a first arcuate member slot curve; and

the first arcuate member slot curve having a first arcuate member slot curve center, the first arcuate slot curve center located near the seat H-Point.

15 29. The automobile seat of claim 21 where the recliner mechanism comprises;

a first arcuate member having a first arcuate member slot moveably holding a portion of the first leg, the first arcuate slot member having a first arcuate member slot curve and the first arcuate member slot curve having a first arcuate member slot curve center, the first arcuate slot curve center located near the seat H-Point; and

20 a second arcuate member having a second arcuate member slot moveably holding a portion of the second leg, the second arcuate slot member having a second arcuate member slot curve and the second arcuate member slot curve having a second arcuate member slot curve center, the second arcuate slot curve center located at some point other than the H-Point.

30. A seat recliner system for a seat, the seat having a seat H-Point, the seat having a seat back and a seat pan, comprising:

a first recliner mechanism moveably attached to the seat back by a first seat holder, the first recliner mechanism having a first recliner mechanism arcuate slot, the first
5 recliner mechanism arcuate slot having a first recliner mechanism arcuate slot curve, the first recliner mechanism arcuate slot curve having a first recliner mechanism arcuate slot curve center;

a second recliner mechanism moveably attached to the seat back by a second seat back holder, the second recliner mechanism having a second recliner mechanism arcuate slot, the
10 second recliner mechanism arcuate slot having a second recliner mechanism arcuate slot curve, the second recliner mechanism arcuate slot curve having a second recliner mechanism arcuate slot curve center; and

the first recliner mechanism arcuate slot curve center and the second recliner mechanism arcuate slot curve center defining a line segment, whereby the line segment is located
15 near the seat H-Point.

31. The seat recliner system of claim 30 where the seat H-Point lies on the line segment.

32. The seat recliner system of claim 31 where the line segment is parallel to the seat pan.

20 33. The seat recliner system of claim 32 where the line segment is parallel to the seat back.

34. The seat recliner system of claim 33 where the first seat holder is comprised of a first plurality of wheels and the second seat holder is comprised of a second plurality of wheels.